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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/719,996	11/21/2003	Abdelali Hannoufa	1096.021A	3650

23405 7590 02/06/2007  
HESLIN ROTHENBERG FARLEY & MESITI PC  
5 COLUMBIA CIRCLE  
ALBANY, NY 12203

EXAMINER
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PAGE, BRENT T

ART UNIT	PAPER NUMBER
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1638

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	02/06/2007	PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

**Office Action Summary**

Application No.

10/719,996

Applicant(s)

HANNOUFA ET AL.

Examiner

Brent Page

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 15 November 2006.  
 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.  
 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-36 is/are pending in the application.  
 4a) Of the above claim(s) 1-18 and 25-36 is/are withdrawn from consideration.  
 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.  
 6) ☒ Claim(s) 19-24 is/are rejected.  
 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.  
 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.  
 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  
 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
 a) ☐ All b) ☐ Some \* c) ☐ None of:  
 1. ☐ Certified copies of the priority documents have been received.  
 2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☐ Notice of References Cited (PTO-892)  
 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)  
 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)  
 Paper No(s)/Mail Date \_\_\_\_\_.  
 4) ☐ Interview Summary (PTO-413)  
 Paper No(s)/Mail Date \_\_\_\_\_.  
 5) ☐ Notice of Informal Patent Application  
 6) ☐ Other: \_\_\_\_\_.

## **DETAILED ACTION**

### ***Specification***

The amendment of the specification to remove the hyperlink in the Reply filed by Applicants on 11/15/2006 is acknowledged and the objection to the specification is hereby withdrawn.

### ***Claim Objections***

The amendment of claim 24 in the Reply filed by Applicants on 11/15/2006 to correct the typographical error is acknowledged and the objection to claim 24 is hereby withdrawn.

### ***Double Patenting***

The cancellation without prejudice of claim 21 of co-pending Application No. 10995951 in the Reply filed by Applicants on 11/15/2006 to the co-pending application is acknowledged and the provisional rejections of claims 19-23 under 35 USC 101 and 35 USC 103 statutory and obviousness-type double patenting respectively, are hereby withdrawn.

### ***Claim Rejections - 35 USC § 112***

Claims 19-24 remain rejected under 35 U.S.C. 112, first paragraph, because the specification, while being enabling for SEQ ID NO:1 and SEQ ID NO:2, does not reasonably provide enablement for any nucleic acid sequence exhibiting ROS repressor and ROS operator binding activity as broadly claimed. The specification does not enable any person skilled in the art to which it

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pertains, or with which it is most nearly connected, to make and use the invention commensurate in scope with these claims.

Applicant's arguments filed 11/15/2006 have been fully considered but they are not persuasive.

Applicants urge that ROS operator binding activity and repressor activity was demonstrated for both SEQ ID NO:1 and SEQ ID NO:2 and that a number of different ROS repressors were disclosed.

Applicants' arguments are not persuasive because the disclosure of two sequences exhibiting the ROS repressor activity does not reasonably provide enablement for the multitudes of ROS repressors commensurate with the scope of the claim. In the previous office action, page 5, peer-reviewed literature was cited that demonstrated the unpredictability in the functioning of ROS repressors. The claim breadth would require the evaluation of ROS repressors from thousands of species, as well as millions of synthetic derivations for their function as ROS repressors.

Therefore the rejection of claims 19-24 under 35 USC 112 first paragraph for enablement is maintained and made FINAL.

Claims 19-24 remain rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claims contain subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

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Applicant's arguments filed 11/15/2006 have been fully considered but they are not persuasive.

Applicants urge that ROS operator binding activity and repressor activity was demonstrated for both SEQ ID NO:1 and SEQ ID NO:2 and that a number of different ROS repressors were disclosed.

Applicants' arguments are not persuasive because the disclosure of four SEQ ID NOs does not adequately represent literally, or otherwise the ROS repressors from thousands of species, as well as millions of synthetic derivations that function as ROS repressors as claimed by Applicant.

Claims 19-24 remain rejected under 35 USC 112 first paragraph for description for the reasons cited in the previous office action, pages 5-7.

***Claim Rejections - 35 USC § 103***

Applicant's arguments, see pages 14-22, filed 11/15/2006, with respect to obviousness under 35 USC 103(a) have been fully considered and are persuasive. The rejection of claims 19-24 has been withdrawn.

The claims are free of the prior art given the failure of the prior art to teach or reasonably suggest a method for selectively controlling the transcription of a gene of interest comprising introducing into a plant a first genetic construct comprising a first regulatory region operatively linked to a ROS operator and a second genetic construct comprising a second regulatory region operatively linked to a nucleic acid sequence encoding a ROS repressor.

No claims are allowed.

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THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Brent Page whose telephone number is (514)-272-5914. The examiner can normally be reached on Monday-Friday 8-5.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Anne Marie Grunberg can be reached on (571)-272-0975. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Brent T Page

DAVID T. FOX  
PRIMARY EXAMINER  
GROUP 180-1638

